

GERLOCZY, Ferenc, dr.; BENCZE, Bela, dr.; KASSAI, Stefania, dr.; BARTA, Lajos, dr.

Recent data on the vaso-protective role of vitamin E in children.
Gyermekgyogyaszat 12 no.8:225-233 Ag '61.

1. A Budapesti Orvostudomanyi Egyetem I sz. Gyermekklinikajának
(Igazgató: Gegesi Kiss Pal dr. akadémikus, egyetemi tanár) közleménye.

(VASCULAR DISEASES PERIPHERAL ther)
(VITAMIN E ther)

GERLÓCZY, Ferenc
SURNAME, Given Name

Country: Hungary

Academic Degrees: Dr

Affiliation: not given

Source: Budapest, Gyermekgyógyászat, Vol 12, No 10, Oct 61, pp 319-320

Data: Bookreview "The Effect of Gravity on the Development of
Unconditional and Conditional Reflexmechanisms."

Author: István FÉNYES, Dr

Publisher: Akadémia Kiadó, Budapest, 1960

GPO 781643

GERLÓCZY, F.; BENCZÉ, B.

Contribution on the significance of vitamin E in childhood. Acta
Paediat. Acad. Sci. Hung. 2 no.4:298-327 '61.

1. I. Kinderklinik der Medizinischen Universität Budapest (Direktor:
Prof. Dr. P. Gegesi Kiss).
(VITAMIN E nutrition & diet) (INFANT NUTRITION)

GERLCCZY, F.; SZABO, J.

Capillary resistance: physiological values in childhood. Acta
pediat, 4 no.1:87-85 '63.

1. First Department of Paediatrics, University Medical School,
Budapest.

(CAPILLARY RESISTANCE)

GERLOCZY, Ferenc, TARJAN, Robert; BENCZE, Bela

Protein deficiency disease in twins fed exclusively on
human milk. Gyermekgyogyaszat 14 no. 8:225-233 Ag. '63.

1. Budapesti Orvostudomanyi Egyetem I. sz. Gyermekklinikajának
(igazgató: Gegesi Kiss Pal dr. akadémikus, egyetemi tanár)
és az Országos Elelmezés- és Taplalkozás-tudományi Intézet
(igazgató: Tarjan Robert dr. egyetemi tanár) közleménye.
(DISEASES IN TWINS) (PROTEIN DEFICIENCY) (MILK, HUMAN)

GERLOCZY, Ferenc, dr.

First days of an infant. II. Elet tud 18 no.9:278-280
3 Mr '63.

GERLOCZY, Ferenc, dr.

The first days of the infant. Elet tud 18 no.8:234-237
24 F '63.

*

GERLOCZY, Ferenc, dr.; SZABO, Jozsef, dr.

Examination of capillary resistance in childhood. (Determination of physiological capillary resistance values in premature and newborn infants and children. Gyermekgyogyaszat 14 no.3:65-74 Mr '63.

1. Budapesti Orvostudomanyi Egyetem I. sz. Gyermekklinikajának (Igazgató: Gegesi Kiss Pal dr., akadémikus, egyetemi tanár) kozleménye.
(INFANT, PREMATURE) (CAPILLARY RESISTANCE)

GERLOCZY, Ferenc, dr.; BENCZE, Bela, dr.; IVANYI, Kornel, dr.

Demonstration of vitamin E, a new biologically active substrate,
in the vernix caseosa. Magy. noorv. lap. 26 no.1:21-22 Ja '63.

1. A Budapesti Orvostudomanyi Egyetem I. sz. Gyermekklinika Janak
kozleménye (Igazgató: Gegesi Kiss Pal dr. akademikus, egyetemi tanár).
(VITAMIN E) (VERNIX CASEOSA)

GERLOCZY, F.; LETENYEI, C.; SZENASY, J.; REMENAR, L.; PARAICZ, E.

Contribution a l'etude de l'hemihypertrophie. (A propos de
10 nouveaux cas d'hemihypertrophie vraie). Acta paediat. acad.
sci. Hung. 4 no.2. 159-183 '63.

1. Iere Clinique de Pediatrie de l'Universite Medicale de
Budapest (Directeur: Prof. P. Gegesi Kiss), et Institut
National de Neuro-Chirurgie (Directeur: Dr. L. Zoltan)
(HYPERTROPHY AND HYPERPLASIA) (ABNORMALITIES)

GERLOCZY, Ferenc, dr.; SCHULER, Dezsö, dr.; LETENYI, Klara, dr.; KISS, Sandor, dr.; HERVEI, Sarolta, dr.

Our observations in a case of hemihypertrophy. Orv. hetil. 106. no.28:1310-1312 11 Jl'65.

1. Budapesti Orvostudomanyi Egyetem, I. Gyermekklinika (igazgato: Gegesi Kiss, Pal, dr.) es II. Gyermekklinika (igazgato: Petenyi, Geza, dr.).

GERLOCZY, F.; SCHULER, D.; LETENYEI, Klara; KISS, S.; HERVEL, Sarolta

Hemihypertrophy: 10 years follow-up and chromosomal study. Acta
paediat. acad. sci. Hung. 6 no.3/4:423-428 '65.

1. First Department of Paediatrics, and Second Department of
Paediatrics, University Medical School, Budapest. Submitted
July 31, 1965.

Hematology

HUNGARY

BENCZE, Bela, GERLOZZY, Ferenc, URAI, Miklos (Mrs), KNEISZL, Ferenc; Medical University of Budapest, I. Pediatric Clinic (Budapesti Orvostudomanyi Egyetem, I. sz. Gyermekklinika), and Schopf-Verei Agost Hospital for Premature Delivery and Premature Infants (Schopf-Verei Agost Köraszúlott Korhaz).

"The Effect of Vitamin E on Hemoglobin Synthesis Under Low Protein Nutritional Conditions."

Budapest, A Magyar Tudományos Akadémia V. Orvosi Tudományok Osztályának Kozlemenyei, Vol XVI, No 4, 1965, pages 297-309.

Abstract: [Authors' Hungarian summary] Protein deficiency anemia was developed in white, male Wistar rats by using a diet which contained only half of the optimal protein amount, 18 per cent. The hemoglobin of the animals which were on this diet was considerably decreased with an average value of 3.4 g per cent. The experimental animals kept on the same diet which also received oral doses of 40-60 mg dl- α -tocopherol daily were able to maintain a normal level of Hb with an average value of 13.1 g per cent. The effect of regular daily doses of vitamin E on the Hb synthesis of animals on a low protein diet was a pronounced one since it completely inhibited the decrease in Hb content in response to the lack of protein. It is thought that a disturbance in the synthesis of globin, the prosthetic group of Hb, was provoked by the experimental diet.

HUNGARY

Budapest, A Magyar Tudomanyos Akademia V. Orvosi Tudomanyok Osztalyanak
Kozlemenyei, Vol XVI, No 4, 1965, pages 297-309.

tration. The details of the mechanism of this action of vitamin E have not yet been elucidated; the cause should, presumably, be sought in the effect of tocopherol on the regulation of protein metabolism. 4 Hungarian, 25 Western references. [Manuscript received 20 Jan 64.]

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- 19 -

GRIFFITH, P.S.; BISHOP, P.S.

Book reviews and bibliographies. Trans. Amer., 1948-1950. 1 v. (2 vols.)
no. 5: 1948-1950. By [ed.]
(XPL 17:1)

VAYNSSTEYN, G.M., inzh.; GERLOVIN, E.G., kand.tekhn.nauk

Mechanization of concreting in the course of mining operations.
Shakht.stroi. no.12:6-9 '58. (MIRA 11:12)
(Mining engineering) (Concrete construction)
(Pneumatic tools)

"APPROVED FOR RELEASE: 09/24/2001

CIA-RDP86-00513R000514910006-5

Card 3/4

ENCLOSURE 01

APPROVED FOR RELEASE: 09/24/2001

CIA-RDP86-00513R000514910006-5"

11/12/2012 5:00

SOURCE CODE: UP/03.13/66/003/014/0126/0129

INVENTORS: Gerlovin, L. I.; Chernovin, N. A.; Averin, V. A.; Nagibin, A. Ya.; Torgashov, A. B.; Aleksandrovskiy, A. A.; Sogachev, V. P.; Mikhaylovskiy, N. V.; Mironov, M. I.

ORG: none

TITLE: Valve with a hydraulic or pneumatic piston drive. Class 47, No. 184084
[announced by the Special Design Office of the Baltic Boiler Building Factory im. ...
Sergo Ordzhonikidze (Spetsial'noye konstruktorskoye byuro kotelstroyeniya Baltiyskogo
zavoda)]

SOURCE: Izobret prom obraz Sov zn, no. 14, 1966, 128-129

TOPIC TAGS: valve, hydraulic piston drive, pneumatic piston drive, ~~pneumatic device~~, ~~pneumatic engine~~, ~~hydraulic device~~

ABSTRACT: The proposed valve with a hydraulic or pneumatic piston drive is designed for opening and closing the through flow-section of main and auxiliary pipings. In order to synchronize the opening and closing of both pipings, its control piston is provided with an annular groove, which, in the open valve position, connects the

Card 1/2

UPC: 621.616.23-82-85

ACC NR: AP6029071

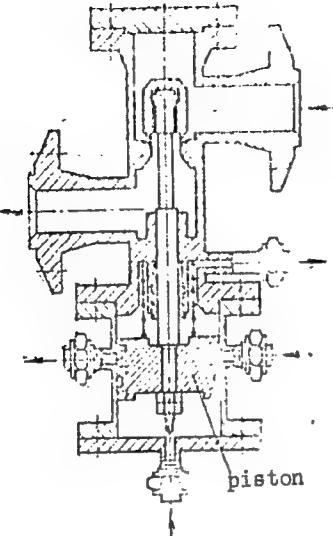


Fig. 1. Piston valve

intake and outlet cavities of the auxiliary piping (see Fig. 1). Orig. art. has:
1 figure.

[AV]

OBJ CODE: 21j / SUBM DATE: 11May65 /

Card 2/2 mjs

YENIN, Vladimir Iosifovich; GERLOVIN, L.I., retezenter; LEVIN, B.M., otv. red.; SAMILAR, N.V., red.izd-va; KOTLYAKOVA, O.I., tekhn.red.

[Marine boilers; their grouping and design] Kotly morskikh sudov. Komponovka i raschet. Leningrad, Izd-vo "Morskoi transport," 1959. 422 p.

(MIRA 13:3)

(Boilers, Marine)

GERLOVIN, Lazar' Izrailevich; SLUTSKER, Semen Miseyevich; YENIN,
V.I., kand. tekhn. nauk, retsenzent; KHAVKIN, A.Ye., inzh.,
retsenzent; NIKONOV, A.A., nauchnyy red.; NIKITINA, R.D.,
red.; SHISHKOVA, L.M., tekhn. red.

[Marine waste heat and combination boilers] Sudovye utilizatsionnye i kombinirovannye kotly. Leningrad, Sudpromgiz,
1962. 250 p. (MIRA 15:8)
(Boilers, Marine) (Heat regenerators)

GOL'DENKON, Aleksandr Kel'manovich; BABADZHANYAN, Levon Arakelovich;
MASLOV, V.V., kand. tekhn. nauk, retsenzent; GELLOVIN, L.I.,
inzh., retsenzent; EYTVID, L.V., nauchnyy red.; OZIROVA, Z.V.,
red.; TSAL, R.K., tekhn. red.

[Performance and operation of marine boilers] Rabochie protsessy
i eksploatatsiya sudovykh kotlov. Leningrad, Sudpromgiz, 1962.
423 p.

(MIRA 15:11)

(Boilers, Marine)

YEMIN, Vasil'evich Sosifovich; Galkin, V.I., retranslate; Khol'kin, I.I., prof., machine, red.; Tikhonov, I.I., red.

[Arrangement and design of marine steam boilers] Komponovka i raschet morskikh parovykh kotlov. Moskva, Transport, 1964. 319 p. (MIRA 17:9)

GERLOVIN, ya.1.

Glass structure according to infra-red absorption spectra. I. I.
Gerlovin (Compt. rend. Acad. Sci. U.R.S.S., 1943, No. 126-127).—
Glass films of thickness ~10 μ . show a strong absorption max. at
9-10 μ ., and fused quartz at 9 μ . This supports the assumption
that silicate glasses consist of SiO_4 tetrahedra. A band at 12-13 μ .
indicates a ring structure of the tetrahedra. Addition of metal
oxides causes the max. of the bands to become more diffuse and to
shift to longer λ . Results indicate that glass has cryst. properties
which diminish as the composition becomes more complex.
N. M. B.

100
GERLOVIN, Ya. I.

Relation between chemical composition and glass transmission in the infra-red. J. I. Gerlovin (*Compt. rend. Acad. Sci. U.R.S.S.*, 1943, 28, 170-173).—30 borate, 20 silicate, and 4 phosphate glasses, and vitreous SiO_2 and B_2O_3 (with 0.8% H_2O to prevent decom. turbidity) were investigated. Silicate systems show the greatest transmission, with a broad feeble transmission band for the silicate glasses at $2.8 - 2.8 \mu$. Borate glasses show absorption bands at 2.05 and 3.7μ , and, for lighter glasses, at 2.2 and 3.4μ ; B_2O_3 has the least transmission. Phosphate glasses show absorption at 2.2 to a max. at 3.8μ . Fused quartz has a sharp absorption max. at 2.7 and a feeble max. at 3.7μ . In all cases, addition of metal oxides to the glasses increases the transmission, the increase being more marked in passing from light- to heavy-metal oxides. N. M. B.

VEYNGEROV, M.L.; GERLOVIN, Ya.I.; PANKRATOV, N.A.

A negative optico-acoustical phenomenon. Opt. i spektr. 1 no.8:
1023 D '56. (MLRA 10:2)

(Molecular dynamics) (Infrared rays)

2.4(7), 5(1),

-7-1-16/27

AUTHORS: Gerlovin, Ya.I. and Globodskaya, P.V.

TITLE: Increase of the Sensitivity of the Cuticle-Reflectometric Method of Gas Analysis by the Use of Cells with Multiple Passage of Radiation. V. V. Benyse chuvstvitel'nosti optiko-akusticheskogo metoda issledovaniya gazu putem eribneniya kipyet s mnogokratnym prolozheniem svetlosti

PERIODICAL: Optika i spektroskopiya, 1959, Vol. 7, No. 1, p. 103-110 (USSR)

ABSTRACT: The authors discuss an optico-acoustic analyzer with multiple-passage cells (Fig 1). The main components of the analyzer are a working cell (1), a comparison cell (3), a rotating disk with apertures (4), an optico-acoustic receiver (5), an amplifier (6) and a detector (10). The working cell (1) was filled with a mixture of (i) a gas exhibiting no optical absorption in the range of wavelengths $\Delta\lambda$ and (ii) a gas absorbing in the range $\Delta\lambda$ (it is required to find the amount of the absorbing gas in the working cell). The comparison cell (3) was filled with a non-absorbing gas, which might contain a known amount of the absorbing gas. The optico-acoustic receiver (5) was filled with the absorbing gas. Light proceeded from a source (2) via the mirrors (6, 7) to both cells. In each cell light was reflected back and forth (4-52 times) between mirrors I, II and III until it emerged via slits 8.

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Increase of the Sensitivity of the Cavity Resonator Method of Determination of the Frequency of Cells with Multiple Passages of Radiation

The light beam from the cavity resonator method can be used in such a way that a phase-shift of 180° occurs in the two cells. Under such conditions the S. T. (sum of light intensity) and D. T. (differential) are equal, absorbing gas in both cells being equal. Let $\Delta\omega$ be the difference between the detector intensities of the different $\Delta\omega$ (extremes) of the two cells. The author has shown that the value of $\Delta\omega$ does not change with increase of N , the number of passes of the light in the two cells. The ratio of $\Delta\omega$ to the value of $\Delta\omega$ at the minimum of $\Delta\omega$ according to the sensitivity of the analyser (defined as the ratio of $\Delta\omega$ to $\Delta\omega$ at the minimum of $\Delta\omega$) is shown as a function of the number of passes N . Since the light has to increase linearly with the number of passes N , since the loss of light due to reflection at the mirrors I-II is constant, the estimation of the losses due to reflection at the mirrors I-II and the estimation of the loss due to reflection at the mirrors III-IV are the same. The value of $\Delta\omega$ becomes constant at a certain value of N , the so-called maximum of N ; for a cavity resonator with a period of 10^{-3} m the maximum of N is

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100-14/27
Increase of the sensitivity of the detector by the
Use of cells with multiple holes.

value of λ_{max} is 3600 Å. The
of the circuit
are 4 figures.

SUBMITTED: (Signature)

Card 5/3

AUTHOR: Garlovin, Ya. I.

07/31-7-4-26,62

TITLE: The Optico-acoustic Effect in the Ultraviolet Region of the Spectrum

PERIODICAL: Optika i spektroskopiya, 1959, Vol 7, Nr 4, pp 571-572 (USSR)

ABSTRACT: Monoatomic gases, as well as nitrogen, oxygen and hydrogen, do not absorb in the infrared region and, therefore, the optico-acoustic effect, discovered by Bell, Röntgen and Tyndall (Ref 1), is not observed at infrared frequencies. The optico-acoustic effect could be expected, however, when these gases (and gases which absorb at infrared frequencies) were illuminated by an interrupted ultraviolet beam. This was in fact observed visually by L.L. Veyngarov and G. Ya Turovskiy in 1941. The present author reports objective observations (using an optico-acoustic receiver) of the optico-acoustic effect in the ultraviolet region. The receiver was filled with the gas to be investigated and fitted with a resonance electrodynamic microphone. An 0.5 kW hydrogen lamp, with a fluorite window, was placed in front of the receiver. The ultraviolet radiation from the lamp was modulated by applying 400 c/s voltage to the hydrogen lamp anode. Nitrogen, oxygen and acetylene (the latter absorbs also in the infrared region) was found to exhibit the optico-acoustic effect when subjected to intermittent ultraviolet radiation. The

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CV/51-7-4-26/32

The Optico-acoustic Effect in the Ultraviolet Region of the Spectrum

signal-to-noise ratio was 5 in the case of nitrogen, 8 in the case of oxygen and 35 in the case of acetylene. To verify that the signal was due to ultraviolet radiation the author placed a thin mica plate (which is transparent in the infrared region but absorbs ultraviolet frequencies, between the lamp and the receiver; the signals then disappeared. There are 2 references, 1 of which is Soviet and the other mixed (English and German).

SUBMITTED: April 18, 1959

Card 2/2

24(1)

AUTHOR(S):

Gerlovin, Ya. I. Slobodskaya, L. V.

SOV/32-15-3-10, 62

TITLE:

Increase of the Sensitivity of the Opto-acoustical Method of Gas Analysis by Using Bulbs With a Repeated Passage of Rays
(Povysheniye chuvstvitel'nosti optiko-akusticheskogo metoda gazovogo analiza putem primeneniya klyuvet s mnogokratnym prokhozhdeniyem radiatsii)

PERIODICAL:

Zavodskaya Laboratoriya, 1959, Vol 25, Nr 3, pp 303-304 (USSR)

ABSTRACT:

A lecture on this investigation was given at the XII Vsesoyuznoye soveshchaniye po spektroskopii (Twelfth All Union Conference of Spectroscopy) in Moscow in November 1958. An opto-acoustical gas analyzer was constructed and tested. The apparatus contains bulbs according to the scheme (Ref 3) and serves for analyzing small amounts of gas following the principle of infra-red rays absorption. The sensitivity of the apparatus depends on the rule governing the ray-absorption in the substance to be investigated. It was found that the most rational application is at such a degree of concentration at which absorption in the bulbs follows the linear law. The limit of sensitivity for analyses of nitrogen on CO_2 admixtures is at $2 \cdot 10^{-5}\%$ CO_2 . This value was found

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SCN 72-33-3-13, 62
Increase of the Sensitivity of the Opto-acoustical Method of Gas Analysis by
Using Bulbs With a Repeated Passage of Rays

with a width of 50 cycles of the transmission band of the amplifying unit which corresponds to a time constant of $5 \cdot 10^{-3}$ seconds. If the latter is increased to 5 seconds the above value changes to $7 \cdot 10^{-7}$. With a corresponding change of the design of the bulb the compression of the mixture to be analyzed leads to an increase in the sensitivity of the gas analyzer, proportionally to the increase in pressure. There are 3 references, 2 of which are Soviet

Card 2/2

28(5)

S/019/60/000/05/220/350
D002/D006

AUTHORS: Slobodskaya, P.V., Gerlovin, Ya.I. and Veynagerov, M.L.

TITLE: Optical Acoustical Method of Gas Analysis

PERIODICAL: Byulleten' izobreteniy, 1960, Nr 5, p 47 (USSR)

ABSTRACT: Class 421, 4₁₃. Nr 126657 (456024/08721/26 of 26 Apr 1955).
1) A method for analyzing gas mixtures by producing pressure variations in a chamber filled with the gas under investigation by means of modulated infrared radiation. The quantitative relation of gases in the mixture absorbing infrared radiation is measured by the shift magnitude of the pressure variation wave phase with respect to the modulated radiation phase. 2) To permit the analysis of gas mixtures not absorbing infrared radiation, a quantity of another gas is added which absorbs it, e.g. carbon dioxide.

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S/051/60/009/005/014/019
E201/E191

AUTHOR: Gerlovin, Ya. I.

TITLE: A Method of Determining the Radiation Probability of
Gases and Vapours

PERIODICAL: Optika i spektroskopiya, 1960, Vol. 9, No. 5, pp 664-665

TEXT: The author describes a method of determining the probability of spontaneous radiation at wavelengths of rotation-vibration absorption bands of gases and vapours. The method is based on a comparison of the intensities of emission by a gas and a black body at the same temperature, which is higher than the temperature of a radiation receiver. The method was applied to carbon dioxide gas in the region of 4.3 μ absorption band at room temperature. A lead telluride photoresistor (1 in a figure on page 665), cooled with liquid air, was used as a receiver. An interference filter (2) was placed in front of the receiver; the filter had a transmission maximum in the region of 4.3 μ . Behind the filter a cell with carbon dioxide (3) or a smoked glass plate (4) was placed. The emissivity of the glass plate was taken to be equal to the emissivity of a black body at room temperature. Both the cell and the smoked glass plate were at

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S/051/60/009/005/014/019
E201/E191

A Method of Determining the Radiation Probability of Gases and Vapours

room temperature. The cell had a fluorite window (5) and was fitted with a plane mirror (6) at the back wall. A modulating disc (7) was rotated in front of the cell; the modulation frequency was 400 c/s. The receiver was connected to an amplifier (8) and a synchronous detector (9). A photocell (10), illuminated with a lamp (11) was used as a source of standard voltage. The probability of emission of 4.3 my radiation was found to be 350 sec^{-1} .

There are 1 figure and 6 references: 2 Soviet and 4 English.

SUBMITTED: March 21, 1960

Gard 2/7

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CERLOVIN, Ya.I.

Measurement of the acoustooptical effect during the irradiation
of certain gases and vapors by ultraviolet rays. Opt. i spektr.
15 no.5:713-715 N '63. (MIRA 16:12)

ACCESSION NR: AP4011401

8/0051/64/016/001/0017/0021

AUTHOR: Gerlovin, Ya.I.; Orlova, I.N.

TITLE: Measurements of the probability for spontaneous emission of some gases

SOURCE: Optika i spektroskopiya, v.16, no.1, 1964, 17-21

TOPIC TAGS: spontaneous emission, infrared band, transition probability, emission probability, carbon monoxide, nitrogen monoxide, sulfur dioxide, molecular radiation

ABSTRACT: The paper gives the results of measurements of the probabilities for spontaneous (infrared) emission, corresponding to rotational-vibrational states of the molecule, for nitrogen monoxide (N_2O) in the $4.5\text{-}\mu$ region, carbon monoxide in the $4.62\text{-}\mu$ region, and sulfur dioxide in the $4.0\text{-}\mu$ region. The measurements were carried out using the procedure developed earlier by one of the authors (Ya.I.Gerlovin, Opt. i spektro., 9, 664, 1960) and based on comparison of the intensity of the gas with the intensity of the radiation from a black body at the same temperature, using for this a rotating disc, also maintained at the same temperature. Photographs of the experimental set-up are reproduced. A formula used for calculating the probability is derived. The experiments consisted in measuring the variation

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ACC.NR: AP4011481

of the photocell (a liquid air-cooled Tl-Pb photoresistor) signal strength as a function of the gas concentration in the cell at 290 and 300°K. The values obtained for the probabilities are 235 sec^{-1} for N_2O , 33 sec^{-1} for CO , and 4.0 sec^{-1} for SO_2 (these are based on the 290°K measurements). The results are in good agreement with the data of other authors, obtained by the same and other methods (extrapolation and dispersion methods). Orig.art.has: 1 formula, 3 tables, and 3 figures.

ASSOCIATION: none

SUBMITTED: 05Apr63

DATE ACQ: 14Feb64

ENCL: 00

SUB CODE: PH

NR REF Sov: 001

OTHER: 008

Card 2/2

L 9885-66 EWT(1)/EWT(m) IJP(c) DS
ACC NR: AP5027662 SOURCE CODE: UH/0051/65/019/005/0685/0691

AUTHOR: Gerlovin Ya. I.

ORG: none

TITLE: Determination of the relative optic diameters of the collisions of the
nitrogen oxide molecules by the optic-acoustic method

SOURCE: Optika i spektroskopiya, v. 19, no. 5, 1965, 685-691

TOPIC TAGS: gas analyzer, absorption coefficient, nitrogen oxide

ABSTRACT: I. N. Orlov (Opt. and spect., 13,471,1962) showed that an optic-acoustic
gas-analyzer, equipped with a multiple passage, could be used for evaluating the
relative optical diameters of the collisions of gas molecules for the case of the
infrared regions of absorption. The author used a hermetic optic-acoustic gas-
analyzer capable of performing measurements corresponding to various pressures of
the gas, and, in particular for the pressures considerably lower than that of the
atmosphere. There was no need to assume any dependence law between the coefficient
of absorption and the concentration of the absorbing gas. With some improvements

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UDC: 539.196.3

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L 9835-66
ACC NR: AP5027662

in the design of the apparatus, the method yielded high accuracy. The changes of the radiation flux or the muddiness appearing in the windows of the apparatus did not interfere with the measurements of the optic diameters of the collision of gas molecules. Orig. art. has: 3 figures, 4 formulas and 2 tables.

SUB CODE: 20/ SUBM DATE: 14Jul64/ NR REF Sov: 001/ OTHER: 004

L
2/2

L 45796-66 EWT(m)/EWP(t)/ETI IJP(e) JD
ACC NR: AR6023264

SOURCE CODE: UR/0058/66/000/003/D032/D032

AUTHOR: Gerlovin, Ya. I.; Orlova, I. N.

49
B

TITLE: Determination of the probability of spontaneous emission of nitrous oxide,
carbon monoxide, and sulfur dioxide

11 11

SOURCE: Ref zh. Fizika, Abs. 3D251

REF. SOURCE: Tr. Komis. po spektroskopii. AN SSSR, t. 3, vyp. 1, 1964, 205-213

TOPIC TAGS: nitrogen oxide, carbon monoxide, sulfur compound, oxide, probability,
black body radiation, radiation intensity

ABSTRACT: A previously developed method, based on a comparison of the intensity of
radiation of the investigated gas with the intensity of black-body radiation, is used
to determine the spontaneous emission probability corresponding to the rotational-
vibrational states of the molecules of nitrous oxide in the 4.5μ region, carbon mono-
xide at 4.62μ , and sulfur dioxide at 4.0μ . The obtained values of this constant are
 235 sec^{-1} , 33, and 4.0 sec^{-1} for N_2O , CO , and SO_2 , respectively. From the magnitude
of the probability of the spontaneous emission, the authors calculate the absolute

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I 45796-66
ACC NR: AR6023264

intensities of the indicated bands. The obtained values are close to the results by others. The possibility of employing this method to determine the probability of spontaneous emission of solids is demonstrated. [Translation of abstract]

SUB CODE: 20

Card 2/2 JS

Ref ID: A11075-51

Source ID: UN/UDS1/03/012/001/0033/0035

AUTHOR: Seriovin, Yu. I.

CAG: none

TITLE: Determination of the probability of spontaneous emission corresponding to infrared absorption bands

SOURCE: Optika i spektroskopiya, v. 21, no. 1, 1966, 33-35

TOPIC TAGS: absorption band, radiation detector, IR measurement

ABSTRACT: The author (who earlier developed a method of determining the probability of spontaneous emission of infrared bands in gases and vapors) considers the use of non-selective radiation detectors in order to broaden the range of measurements over the infrared spectrum. Preliminary results are given for spontaneous emission and absolute intensity of the long wave absorption band of nitrous oxide measured with a non-selective detector at room temperature. One cannot measure the emission signal directly. Therefore a cold body is placed behind the test sample. The test equipment consists of two coolers filled with dry ice positioned at right angles to each other. A slotted disk, silvered on one side, is placed at 45° at the point where the axes of the cooling units intersect. In line with one of the coolers is the gas sample, an optical filter, a signal amplifier, and a recording meter. The disk serves as a chopper to al-

UDC: 539.194

Card 1/2

ACC NR: AP6025951

ternately pass the signal from one cooler and then reflect the signal from the other. The details of the equipment, its operation, and measurements made are given. Orig. art. has: 1 figure, 3 formulas.

SUB CODE: 20/ SUBM DATE: 29Mar65/ ORIG REF: 006

Card 2/2 egk

ACC NR: AP6025974

SOURCE CODE: UR/C051/66/021/001/0138/0139

AUTHOR: Gerlovin, Ya. I.

70

5

ORG: none

TITLE: Determination of the probability of spontaneous radiation in solids

SOURCE: Optika i spektroskopiya, v. 21, no. 1, 1966, 138-139

TOPIC TAGS: spectrophotometry, IR spectroscopy, black body radiation, emission spectrum, spectrum analysis, spectrum analyzer, IR spectrometer, radiation spectrometer, IR radiation, thermal radiation detector, solid physical property

ABSTRACT: A new method for measuring spontaneous radiation from solids is described. The method is suitable for calculation of the Einstein's coefficients corresponding to the IR radiation bands of solids. The experiments were carried out using a calcium fluoride crystal doped with cerium. The total IR radiation from this material consists of the emission due to the cerium ions and the background radiation. To isolate the desired signal, the emission of the cerium-doped calcium fluoride crystal was compared to that of a pure calcium fluoride crystal. Since the latter is transparent at these wavelengths, its emission is due solely to the background radiation. A blackened metal plate was used as the black body radiation reference. The emissions from the three radiators were measured alternately by means of a Pb-Te detector (cool-

UDC: 535.330

Card 1/2

ACC NR: AP6025974

ed to 90°K), connected through a frequency selective amplifier to a vacuum tube voltmeter. A mirror optical chopper modulated the radiation before its passage through an interference filter with a bandpass in the 4 to 5 μ region. An expression relating the measured radiation intensities to the probability of spontaneous radiation is given. Orig. art. has: 1 figure, 1 table.

SUB CODE: 20/ SUBM DATE: 24Nov65/ ORIG REF: 004/ OTH REF: 002

kh

Card 2/2

GERLOVIN, Ye.Sh.

Data for a comparative histological investigation of the reactivity of the epithelium and glands of the mucosa of the anterior segment of the gastrointestinal system in lower vertebrates. Trudy ISGMI 16:169-192 '53. (MLRA 10:8)

1. Kafedra gistolologii i embriologii Leningradskogo sanitarno-gigiyenicheskogo meditsinskogo instituta (zav.katedroy prof. S.I.Shchelkunov)

(GASTROINTESTINAL SYSTEM, physiology,
regen. of epithelium & glands in lower vertebrates)
(EPITHELIUM,

gastrointestinal, regen. in lower vertebrates)
(REGENERATION,

gastrointestinal epithelium & glands in lower vertebrates)

GARLOVIN, Ya. Sh.

Data for a comparative histological study of reactivity of the epithelium and glands of the mucous membrane of the anterior segment of the gastrointestinal system in higher vertebrates, Trudy LSGMI 16:193-228 '53. (MLRA 10:8)

1. Kafedra histologii i embriologii Leningradskogo sanitarno-gigienicheskogo meditsinskogo instituta (zav. kafedroy prof. S.I. Shchelkunov)

(GASTROINTESTINAL SYSTEM, physiology,
regen. of epithelium & glands in higher vertebrates)
(EPITHELIUM,

gastrointestinal, regen. in higher vertebrates)
(REGENERATION,
gastrointestinal epithelium & glands in higher vertebrates)

GERLOVIN, Ye.Sh.

Activities of the All-Union Scientific Society of Anatomists,
Histologists and Embryologists in 1949-1952. Arkh.anat.gist.i
embr. 30 no.5:87-94 S-0 '53. (MLRA 6:12)
(Anatomy) (Histology) (Embryology)

GERLOVIN, YE. SH.

Nov/Dec 53

USSR/Medicine - Morphology

"Plenary Session of the All-Union Scientific Society of Anatomists, Histologists, and Embryologists, in Leningrad," D.A. Zhdanov and E. Sh. Gerlovin

Usp Sov Biol, Vol 36, No 3(6), pp 380-389

This session was held 23-27 Jun 53 in Leningrad to discuss the role of morphology in the USSR, new methods and techniques of morphological research, and plans for making anatomical and histological work in higher institutes of learning serve a more practical purpose. The key speech was made by A.N. Studitskiy and "The Tasks of

273T58

Soviet Morphology." He only mentioned the existence of tasks and then launched into a theoretical discussion of the Soviet concept of morphology. This speech was discussed, then other reports were read, among them "Electron Microscopy in Cytohistological Research" by Prof. G.M. Frank (Moscow), and a report on Radicautography by A.M. Kazin (Moscow). The article does not disclose any new organizational plans.

GERLOVIN, Ye.Sh.

In the Presidium of the Administration of the All-Union Scientific Society of Anatomists, Histologists, and Embryologists. Ye.Sh. Gerlovin. Arkh. anat. i embr. 32 no.2 Ap-Je '55. (MLRA 9:1)

(ANATOMY-SOCIETIES) (HISTOLOGY-SOCIETIES)
(EMBRYOLOGY-SOCIETIES)

GERLOVIN, Ye.Sh.

Achievements of the All-Union Society of Anatomists, Histologists
and Embryologists in 1953-1954. Arkh. anat. gist. i embr. 32 no.4;
102-106 O-D '55 (MLRA 9:5)

(ANATOMY--SOCIETIES)

GERLOVIN, E. SH.
USSR/General Biology - Individual Development.

B-4

Abs Jour : Ref Zhur - Biol., No 7, 1958, 28527

Author : Gerlovin, E.Sh.

Inst :

Title : Data on Comparative-Histological Study of Embryonic Development of Organs and Tissues of the Anterior Section of Digestive Systems in Vertebrates.

Orig Pub : V sb.: Probl. sovrem. embriologii. L., Un-o, 1956, 205-211

Abstract : A study of histogenesis of the anterior section of the digestive systems in groundlings, frogs and cats, as well as development of epithelium and secretory apparatus of the oral cavity and esophagus of the human fetus, showed that the histological structure of these organs and tissues at all stages of development is determined by their relation to the external medium and function, as well as to their correlative relationship to other

Card 1/2

GERLOVIN, Ye. Sh.

USSR / General Biology. General Histology.

B-3

Abs Jour: Ref Zhur-Biol., No 18, 1958, 80996.

Author : Gerlovin, E. Sh.

Inst : ~~Not given~~

Title : Some Natural Regularities of Histogenesis of the
Anterior Division of the Digestive System in the
Human Being.

Orig Pub: V Sb., Probl. sovrem. embriologii. L., Un-t, 1956,
281-288.

Abstract: Developing subsequently in the intra-abdominal
period, the secretory elements of the digestive
system in the human being (the mucous glasslike
cells and extra-epithelial glands of the esophagus,
the small glands and the large salivary glands of
the oral cavity) have a functional significance
and express the adaptability of the embryo to the
development of specific conditions of environment.

Card 1/2

~~SECRET~~

Journal of the administration of the All-Union Society of Anatomists,
Histologists and Embryologists in Khar'kov. Arkh.anat.,hist. i embr.
34 no.2:122-124 Khar'kov '57. (MIRA 10:10)
(MORPHOLOGY)

GERLOVIN, Ye.Sh. (Leningrad, 194, ul. Kalyeyeva, d.16, kv.2)

History of the All-Union Society of Anatomists, Histologists, and Embryologists. Arkh.anat.gist. i embr. 34 no.4:108-113 Jl-Ag '57.
(MIRA 10:11)

(ANATOMY, history

All-Union Soc. of Anatomists, Histologists & Embryologists (Rus))

(HISTOLOGY, history

same)

(EMBRYOLOGY, history

same)

ГАРЛОВИН, Я.Ш.

ГАРЛОВИН, Я.Ш.

Plenum of the administration of the All-Union Society of Anatomists,
Histologists and Embryologists held in Minsk on June 8 - 10, 1947.
Arch.anat.gist. i embr. 34 no.5:107-111 S-0 '57. (MIRA 11:1)
(ANATOMY) (HISTOLOGY) (EMBRYOLOGY)

GERLOV IN, Ye. Sh. (Leningrad, ul. Kalyayeva, 16, kv.2)

History of the All-Union Scientific Association of Anatomists,
Histologists, and Embryologists. Arkh.anat.gist, i embr. 35 no.
3:86-96 My-Je '58 (MIRA 11:7)

(SOCIETIES, MEDICAL, hist.

All-Union scientific, Assoc.of Anat., Histol. &
Embryol. (Rus))

GERLOVIN, Ye.Sh.

Regeneration of denervated and intact submaxillary glands [with summary in English]. Trudy LSOMI 42:132-154 '58 (MERA 11:12)

1. Kafedra histologii i embriologii Leningradskogo sanitarno-gigienicheskogo meditsinskogo instituta (zav. kafedroy chlen-korrespondent AMN SSSR, prof. S.I. Shchelkunov).

(REGENERATION,

submaxillary gland, eff. of denervation (Rus))

(SUBMAXILLARY GLAND, physiology,

regen., eff. of denervation (Rus))

(SALIVARY GLANDS--INNERVATION)

GERLOVIN, Ye.Sh.

Regeneration of parotid glands with intact innervation [with summary
in English]. Trudy LSGMI 42:155-69 '58 (MIRA 11:12)

1. Kafedra gistologii i embriologii Leningradskogo sanitarno-
gigienicheskogo meditsinskogo instituta (zav. kafedroy - chlen-
korrespondent AMN SSSR, prof. S.I. Shchelkunov).

(REGENERATION,

parotid gland (Rus))

(PAROTID GLAND, physiol.

regen (Rus))

GERLOVIN, Ye. Sh. (Leningrad, D-194, ul. Kalyayevn, d.16, kv.2)

History of the All-Union Society of Anatomists, Histologists, and Embryologists. Part 3: Organization of the All-Union Society of Anatomists, Histologists, and Embryologists (1931-1949) Arkh. anat. i embr. 36 no.3:81-92 Mr '59. (MIRA 12:7)
(ANATOMY, hist.)

All-Union Scientific Soc. of Anatomists, Histologists & Embryologists (Rus)
(HISTOLOGY, hist.
same)
(EMBRYOLOGY, hist.
same)

GERLOVIN, Ye.Sh. (Leningrad, D-194, ul.Kalyayeva, d.16, kv.2)

History of the All-Union Scientific Society of Anatomists,
Histologists, and Embryologists. Arkh.anat., hist. i embr.
36 no.6:92-101 Je '59. (MIRA 12:9)

(ANATOMY, hist.

All-Union Soc. of Anat.Histol. & Embryol. (Rus))
(HISTOLOGY, hist.

same)

(EMBRYOLOGY, hist.

same)

GERLOVIN, Ye. Sh. (Leningrad, L-194, ul. Kalyayeva, 16, kv.2)

Activities of the All-Union Scientific Society of Anatomists,
Histologists, and Embryologists during 1955- 58. Arkh.anat.
gist,i embr. 37 no.10:94-106 0 '59. (MIRA 13:4)

(ANATOMY)
(HISTOLOGY)
(EMBRYOLOGY)
(SOCIETIES, MEDICAL)

GERLOVIN, Ye. Sh. (Leningrad, D-194, ul. Kalyayeva, 16, kv.2)

Determination and plasticity of tissues under normal, experimental,
and pathological conditions. Arkh.anat.gist.i embr. 37 no.12:104-
118 D '59. (MIRA 13:5)

(HISTOLOGY)

GERLOVIN, Ye.Sh.; LEV, I.D.

Plenary session of the All-Union Society of Anatomists, Histologists,
and Embryologists. Arkh.anat.gist.i embr. 38 no.2:104-130 F '60.
(MIRA 14:6)
(ANATOMY)

GERLOVICH, Ye Sh.

Reactivity and plasticity of the human submaxillary gland in sialolithiasis
and some data for a study of its etiology and pathogenesis. Trudy
LSCMI 63-176 192 '60. (Lilin 15-1)

(CALCULI, SALIVARY)

GRADOLINI, Ye So

Spec. for Dr. S. G. G. ^{radioisotope} analysis of the reactivity
and plasticity of the ³⁵Cl and ³⁶S in salivary glands during various age periods
Trudy LSGM 63:232-241 (1964) (14 x 15:1)
(SALIVARY GLANDS)

GERLOVIN, Ye.Sh.

Conference on the histochemistry of polysaccharides. Arkh.anat.
gist. i embr. 40 no.2:115-125 F '61. (MIRA 14:5)
(POLYSACCHARIDES)

BUKIN, Yu.V.; GERLOVIN, Ye.Sh.; YAKOVLEVA, Ye.S.

Survey of the sessions of the Leningrad Society of Anatomists,
Histologists, and Embryologists in 1959-1960. Arkh. anat. gist.
i embr. 40 no.3:108-115 Mr '61. (MIR 14:5)
(LENINGRAD--ANATOMICAL SOCIETIES)

GERLOVICH, YEVGENIY V. B. (Prof. Dr. phys. med. biol.)

Some problems in the planning and organization of work in student
scientific societies within the departments of histology and
embryology. Arkh. anat., histol. i embriol. no. 6 (1951) 124-140. 10.
GURK 15:5

(HISTOLOGY) (EMBRYOLOGY)

Гайдуков Николай Николаевич родился 16.09.1940 г.

Minutes of the Board of the All-Union Scientific Society of
Anatomist, Histologists and Embryologists in Irkutsk (June
23/24, 1951). Arkh. anat. hist. i embr. 41, no. 12:109-117 P. cl.
(ИМА 15:1)

GERLOVIN, Ya.Sh. (Leningrad, D-194, ul. Kalyayeva, 16, kv.2)

Electron microscopy of the large salivary glands. Arkh.anat.,
gist.i embr. 44 no.1:103-113 Ja '63. (MIRA 16:5)

1. Kafedra gistologii i embriologii (zav. - prof. N.I. Grigor'-
yev) Leningradskogo sanitarno-gigiyenicheskogo meditsinskogo
instituta.

(SALIVARY GLANDS)

(ELECTRON MICROSCOPY)

ACCESSION NR: AR4036037

S/0299/64/000/006/M019/M020

SOURCE: Referativnyy zhurnal. Biologiya, Abs. 6M120

AUTHOR: Gerlovin, Ye. Sh.

TITLE: Transplantation of the submaxillary salivary gland under experimental conditions

CITED SOURCE: Tr. Lenigr. san.-giglyen. med. in-ta, v. 76, 1963, 76-100

TOPIC TAGS: transplantation, organ transplant, salivary gland transplant, submaxillary gland, autotransplantation

ABSTRACT: Autotransplantation of pieces of submaxillary salivary gland (5x5mm) into the oral cavity was carried out in adult cats. The transplants were investigated histologically up to 11 months later. In the central part of the transplant the degenerative processes began early. In the beginning, there was sloughing off of epithelium in the salivary tubules. The cells became wrinkled, the mitochondria agglutinated and became enlarged. The nuclei became pycnotic. Subsequently, the degeneration spread to the secretory epithelium of the terminal parts, and to the epithelium of the other excretory ducts. Degeneration of the transplant was accompanied by inflammation of the surrounding tissue. In the early stages of de-

Card 1/2

ACCESSION NR: AR4036037

generation, the secretion of the mucous cells increased, accompanied by decomposition of the cytoplasm and death of the cells. Together with degeneration, there was proliferation of epithelial and connective tissue cells. In the epithelium, differentiation of mucous secretory cells began. The connective tissue formed an intermediate mass. These processes were most distinct in 10 days. The epithelial regenerate formed basal and surface elements. In the transplant, the salivary tubules did not differentiate. In the absence of excretory ducts, the transplant died. When the transplant epithelium combined with the epithelium of the mucous salivary gland. The author considers this method to be of possible use in stomatological practice. B. Kozhevnikov

DATE ACQ: 09Apr64

SUB CODE: LS

ENCL: 00

Card 2/2

Brasovianu, Ion, M.

"Reconstruction and validation of the primary of the human eye
from the forensic ophthalmology standpoint."

Report submitted for the International Anthropological & Ethnological Sciences,
Moscow, 1-10 August 1986.

ACCESSION NR: AP4034922

S/J181/64/006/005/1418/1423

AUTHORS: Palatnik, L. S.; Gladkikh, N. T.; Gorlovskaya, L. V.; Taran, N. M.

TITLE: The mechanism of ionic compound condensation in a vacuum

SOURCE: Fizika tverdogo tela, v. 6, no. 5, 1964, 1418-1423

TOPIC TAGS: condensation, ionic compound, temperature dependence, vacuum, sodium chloride, potassium chloride, potassium bromide

ABSTRACT: The mechanism of condensation in a vacuum was investigated with NaCl, KCl, and KBr. Samples of the vacuum condensates were prepared by evaporation from cylindrical aluminum oxide crucibles and deposition onto backings of polished copper sheets. A temperature drop in the interval 150-600°C was produced along a sheet. In all cases a boundary was clearly observed, corresponding to a critical condensation temperature T_k , above which there was no deposition. The dependence of T_k on the condensation rate ω was found to be well described by the expression

$$\omega = Ae^{-\frac{Q_k}{kT_k}},$$
 where Q_k is the heat of condensation and A is a constant.

A detailed investigation of the condensate microstructure depending on the
Card 1/2

ACCESSION NR: AP4034922

preparation conditions was carried out for KBr samples. For constant layer thicknesses the average crystal dimensions \bar{L} increased gradually with increasing temperature to 300C. In the interval 300-400C \bar{L} increased rapidly. There was practically no change in \bar{L} from 400C to T_k . At constant backing temperatures \bar{L} increased rapidly with increasing layer thickness $h < 30 \mu$, then increased more slowly. For $h \geq 60 \mu$ \bar{L} remained practically unchanged. Orig. art. has: 1 equation, 13 diagrams, and 2 tables.

ASSOCIATION: Khar'kovskiy gosudarstvennyy universitet (Kharkov State University)
SUBMITTED: 25Nov63

SUB CODE: SS

NO REF Sov: 005

ENCL: 00

OTHER: 003

Card 2/2

L 4913-66 EWT(m)/EWP(i)/EWP(t)/EWP(z)/EWP(b) IJP(c) JD/HW

ACCESSION NR: AP5025324

UR/0126/65/020/003/0396/0400
621.735.3

AUTHOR: Palatnik, L. S.; Gladkikh, N.T.; Gerlovskaya, L. V.

TITLE: Effect of annealing on structure of vacuum-condensed metals

SOURCE: Fizika metallov i metallovedeniye, v. 20, no. 3, 1965, 396-400

TOPIC TAGS: metal film, vacuum, annealing, porosity, metal vapor deposition

ABSTRACT: Metal films, condensed in a vacuum, have a structure and physico-chemical properties different from these of the annealed massive metals. The Gu⁷⁷Ag, Ni, and Fe films were condensed in the 5×10^{-5} torr vacuum directly on the clean polished metal base layer, or after coating it with a thin NaCl layer. The film samples were pretreated at various temperatures and then annealed at temperatures $T_a \leq 1060^\circ\text{C}$ for 0-1200 minutes. The microstructure and microhardness of samples were studied in thin cross sections before and after annealing. The curves of the dependence of the microhardness ($H\mu$) of condensed metal before and after annealing on the temperature of the base layer (T_b), of the dependence of $H\mu$ on annealing time (T_a) and temperature (T_a), of the dependence of the total volume of pores

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L 4913-66

ACCESSION NR: AP5025324

(V) and their average size (d) on T_a were plotted only for Cu and Ni, because the changes in properties of Ag and Fe were similar to those of Cu and Ni. An anomalous decrease in the microhardness of Cu was observed at $T_b=1/3 T_g$ (T_g is a melting point). An annealing of Ni (t_a 1060°C, T_a 0 min.) decreased its microhardness H_μ from 400 to 100 kg./sq.mm. The presence of micropores was observed in vacuum-condensed metals after annealing. The number of pores, their size, and their distribution along the thickness of the condensed layer depended on the temperature of the base layer during condensation. The changes in structure and properties of the vacuum-condensed metals were controlled by their porosity. The metal layers were formed at $T_b < 1/3 T_g$ because the condensation passed through an intermediate metastable liquid phase (mechanism: vapor \rightarrow liquid \rightarrow crystal). This layer had a very distorted structure: it contained the submicropores of vacancy origin and submicrofractures caused by internal stresses. At $1/3 T_g < T_b < 2/3 T_g$, during which the condensation occurred through formation of the crystal phase nuclei and their growth (mechanism: vapor \rightarrow crystal), the submicropores were formed in the boundary between crystals by the mutual screening. The macroporosity appeared after annealing because of the pore growth and possibly because of the effect of residual gases adsorbed by the film during condensation. Orig. art.

Card 2/3

L 4913-66

ACCESSION NR: AP5025324

has: 4 figures and 1 table.

ASSOCIATION: Khar'kovskiy gosuniversitet im. A. M. Gor'kogo (Khar'kov State University); Khar'kovskiy politekhnicheskiy institut im. V. I. Lenina (Khar'kov Polytechnic Institute)

SUBMITTED: 200604/—Sep65

ENCL: 00

SUB CODE: MM, SB

NO REF SOV: 016

OTHER: 000

OC
Card 3/3

REGGAE, J. Y.; GERMARIAK, L. B.; GADKARI, V. L.; HUETTE, C. A.
PARASITARY, L. H.

Diffusion activity of various compounds in connection with
the effect of elevating the level of vacuole fluid, met. A
metabolism. (1964-42636-639) 6-125.

(MRA 2812)

J. KharbDeekh, graduate research assistant, Cornell Univ.,
Ithaca, N.Y.

GERLOVSKIY, V.K.

Recommendations based on well tried techniques. Elek. i tepl.
tiaga 7 no. 2:37-38 F '63. (MIRA 16:2)

1. Mashinist-instruktor depo Ruzayevka Kuybyshevskoy dorogi.
(Electric locomotives—Maintenance and repair)

GERLOVSKIY, V.K., mashinist

More about short circuits in the low voltage wiring of
VL8 electric locomotives. Elek. i tepl. tsiaga 7 no.10:29
0 '63. (MIRA 16:11)

1. Depo Ruzayevka Kuybyshevskoy dorogi.

SUTKUS, Tadas (stygiono; GERL'PERNAS, D. [translator]; KA: L.D.NAI, c.,
red.

[Get acquainted with Soviet Lithuania. Translated from the
Lithuania] Poznakom'tes' s Sovetskoi Litvoi. Vilnius,
Mintis, 1965. 100 p. (NLG 18:10)

YURKEVICH, I.D.; GERLITMAN, V.S.

Forms and hybrids of speckled alder occurring in the White
Russian S.S.R. Biul. Inst. biol. AN BSSR no. 5:63-70 '60.

(MIRA 14:7)

(WHITE RUSSIA—ALDER)

GERJUNG, E.K.; LEVSKIY, L.K.

Yield of argon isotopes from the bombardment of targets with
660 Mev protons. Radiokhimiia 3 no.1:97-100 '61. (MIRA 14:3)
(Argon--Isotopes)

AUTHOR: Germ, A.I.

SOV/109-4-7-15/25

TITLE: Differential Phase Shift in a Twisted Rectangular Waveguide with an Axially Longitudinally Magnetised Ferrite Rod

PERIODICAL: Radiotekhnika i elektronika, 1959, Vol 4, Nr 7, pp 1198-1200 (USSR)

ABSTRACT: A rectangular waveguide with an axially longitudinally magnetised ferrite rod produces a phase shift depending on the magnitude of the magnetic field in the ferrite. The effect is reciprocal, i.e. does not depend on the direction of the wave propagation (Ref 1). The author showed in an earlier work (Ref 2) that the system can become non-reciprocal if the waveguide is twisted (Figure 1a). The non-reciprocity is due to the interaction of the propagating wave and the limit wave, which are coupled by means of the magnetised ferrite and by the boundary conditions at the walls of the waveguide. The propagating wave is the basic H_{10} wave, while the limit wave is one of the waves whose electric vector is polarised in parallel with the wider walls of the waveguide. The system

Card1/3

Differential Phase Shift in a Twisted Rectangular Waveguide with
an Axially Longitudinally Magnetised Ferrite Rod SOV/109-4-7-15/25

was investigated experimentally and the results are shown in Figures 2 and 3. Figure 2 illustrates the dependence of the phase shift φ and the differential phase shift $\Delta\varphi$ on the magnetic field in the ferrite. Curves 6 and 7 of the figure illustrate the differential phase shift for a waveguide system having a twist of $4.5^\circ/\text{cm}$ and $10^\circ/\text{cm}$, respectively. The phase shifts are plotted for a magnetic field up to 1 000 Oe. The measurements were made at the frequency of 9 370 Mc/s; the ferrite rod had a length of 70 mm and a diameter of 6.75 mm. Figure 3 shows the dependence of the losses, the standing-wave ratio and $\Delta\varphi$ on frequency for the waveguide having a twist of $10^\circ/\text{cm}$; the measurements were taken with a field of 70 Oe over a range of $3.2 \text{ cm} \pm 3\%$. It is seen that the losses do not exceed 0.8 db and the standing-wave ratio is less than 1.5.

Card2/3

Differential Phase Shift in a Twisted ^{SQV/109-4-7-15/25} Rectangular Waveguide with
an Axially Longitudinally Magnetised Ferrite Rod

There are 2 figures and 2 references, of which 1 is
English and 1 Soviet.

SUBMITTED: February 2, 1959

Card 3/3

9,2571 (1147,1159)

31492
S/109/62/557//02/011/024
D201/D303

AUTHOR: Germ, A. I.

TITLE: Some problems of the theory of a symmetrical ring circulator

PERIODICAL: Radiotekhnika i elektronika, v. 7, no. 2, 1962,
270 - 279

TEXT: The author shows that a three-port ring circulator described by M. Grace and F.R. Adams (Ref. 1: Three-port ring circulators, Proc. I.R.E., 1960, 48, 8, 1497) can operate at any, including very small, phase shifts. By using the circuit theory methods, in conjunction with the symmetry properties of the equivalent circuit of the ring connections, the author also derives equations, determining the dispersion matrix of the circuit in terms of the parameters of its constituents and determines the relationships which have to be satisfied by those parameters so that the circuit forms a circulator. From these he obtains the relationships which must be satisfied for realizing the circulator. It is shown that a symmetrical

Card 1/3

S/109/62/007/002/011/024

D201/D303

Some problems of the theory ...

three-port ring circuit, consisting of three-terminal circuits and of non-mutually coupled phase-shifters, has the circulator properties for any, also very small, differential phase shifts $\Delta\theta$ in the phase-shifters if the condition of junction matching is satisfied. Small $\Delta\theta$ in a ring circulator are stated to be of interest in designing long-wave circulators. The low-frequency limitations of ferrite devices are determined by resonance losses in the ferrite which increase with the decreasing frequency. If $\Delta\theta$ is small, the ferrite mass may be made smaller, its losses decreased and the operating frequency decreased accordingly. The ring circulator could also find application as a narrow-band device for the decimetric and metric wave-range, in the same way as a Y-circulator with the difference that the ring-circulator can be theoretically designed. Design formulae are obtained which make it possible to determine the required parameters of three-terminal networks from the given parameters of phase-shifters (or vice versa). The formulae were used for designing an experimental circuit having properties of a circulator. To obtain optimum properties some adjustments of magnetic field and of the position of phase-shifting blocks were necessary. After the final adjustments, the following data were obtained

Card 2/3

ACC NR: AP7005613

SOURCE CODE: UR/0413/67/000/002/0051/0051

INVENTOR: Germ, A. I.; Kas'yanov, Yu. P.

ORG: none

TITLE: Six-arm waveguide bridge. Class 21, No. 190442.

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 2, 1967, 51

TOPIC TAGS: waveguide element, waveguide couple, RECTANGULAR WAVEGUIDE

ABSTRACT: An Author Certificate has been issued for a six-arm waveguide bridge (see Fig. 1) containing three sections of rectangular waveguide. To provide equal division of energy the adjacent walls of the waveguide section have longitudinal slots which form a coupling cavity. A longitudinal metal rod is placed inside the coupling cavity. Orig. art. has: 1 figure.

[WP]

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UDC: 621.372.832.6

ACC NR: AP7005613

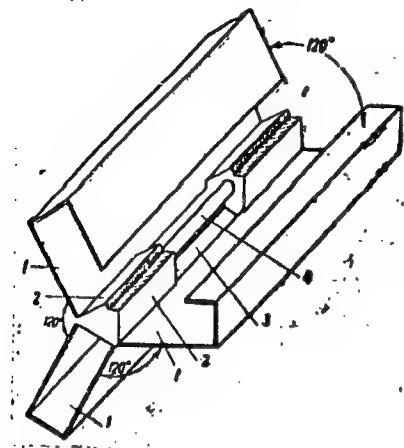


Fig. 1. Waveguide bridge

1 - Rectangular waveguide section;
2 - adjacent narrow walls of the
waveguide section; 3 - longitudinal
slots; 4 - rod.

SUB CODE: 09/ SUBM DATE: 14Mar64/ ATD PRESS: 5115

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L 63227-05

ACCESSION NR: AP5015909

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621.374.335

3

B

AUTHOR: Vasil'yeva, N. P. (Moscow); Matorina, V. S. (Moscow);
Petrushin, B. P. (Moscow); Prokhorov, N. L. (Moscow); Sedykh, O. A.
(Moscow); Germ, E. I. (Moscow)

TITLE: Regions of mutually stable characteristics of logical elements and the
problems of their design

SOURCE: *Avtomatika i telemekhanika*, v. 26, no. 6, 1965, 1067-1073

TOPIC TAGS: logical element, logical element stability, logical element design

ABSTRACT: There are two types of the "transfer" (input/output in relative units)
characteristic of logical elements: the repeater type and the inverter type. The
functional stability of both types, defined as the absence of an undesirable
transition from 1 to 0 or from 0 to 1, is considered. On the basis of input signals
and noise immunity, boundaries of regions are established within which all

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ACCESSION NR: AP5015909

"transfer" characteristics of the elements are mutually stable. Also, the limitations imposed on the repeater and inverter regions by maximum output signals are considered. These design steps are recommended: (1) Establishing the desirable characteristics of logical elements in terms of load, supply voltage, temperature, etc.; (2) Selecting the optimal parameters of the elements; (3) Finding the stable regions on the basis of the element characteristics or on the basis of input-output signals and noise immunity; (4) Allowance for the tolerable parameter spread; (5) Determining parameters for the quality control of logical elements. Orig. art. has 8 figures and 6 formulas.

ASSOCIATION: none

SUBMITTED: 11Jul64 ENCL: 00 SUB CODE: DP, EC

NO REF Sov: 001 OTHER: 000

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Card 2/2

5/130-39-2-5/17

AUTHORS: Germaidze, G.Ye. and Pushkov, V.G., Engineers
TITLE: Inter- Plant School for Bottom repairs and Maintenance
of Open-Hearth Furnaces (Mezhzavodskaya shkola po
remontu podin i ukhodu za martenovskimi pechami)

PERIODICAL: Metallurg, 1959, Nr 2, pp 13-16 (USSR)

ABSTRACT: In July 1958, the Tekhnicheskoye upravleniye
(Technical management) of the Sverdlovskiy sovnarkhoz
(Sverdlovsk Economic Council) together with the TsBTI
ran an inter-works school at the Ural works. The
object was to find and evaluate the best methods for
open-hearth furnace bottom repairs, give practical help
to works on the adoption of progressive methods and to
indicate ways of reducing furnace down time for bottom
repairs. The best steel melters and senior foremen of the
works coming under the council and also of the
Chelyabinsk truboprokatnyy (Chelyabinsk tube-rolling)
and Nazakhskiy metallurgicheskiy (Kazakh Metallurgical
Works) participated. The authors tabulate the bottom-
repair down-time figures for the different works for
1957 and six months of 1958 showing a great diversity.
Best results were obtained by the Nizhne Tagil'skiy

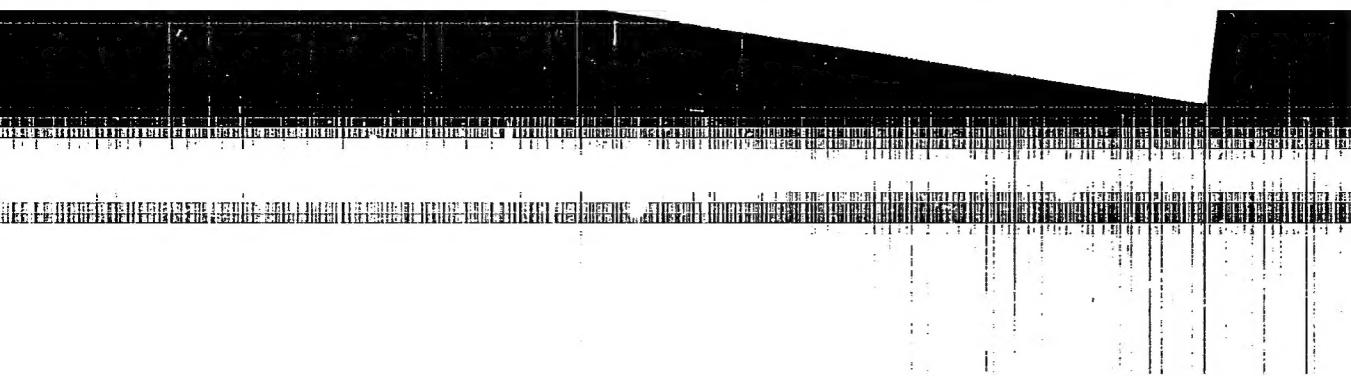
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... authors of
... metallurgical and the
... school stress the
... smoothness, the desirability



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Inter-Plant School for Bottom Repairs and Maintenance of Open-
Hearth Furnaces

preparation for repairs, thorough removal of residual slag and metal at minimal firing rates with compressed air or oxygen, mechanisation of magnesite powder and mill-scale feed to the bottom, the use of a single layer (up to 150 to 200 mm thick) of melted-on magnesite-powder, the heating of the layer at the melt-down firing rate for not more than 1.5 hours, the addition of mill scale (in amounts of 25 to 50% of the weight of magnesite powder) following which slag should not be allowed to accumulate in the bottom, the ramming of the casting hole on a sheet-iron pipe.
There is 1 table.

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